

# Converting vmware images to proxmox images

Besides proxmox I am using both vmware workstation and virtualbox on my laptop, and I would like to be able to run some of the images on proxmox.

This should be possible according to:

[https://pve.proxmox.com/wiki/Migration\\_of\\_servers\\_to\\_Proxmox\\_VE](https://pve.proxmox.com/wiki/Migration_of_servers_to_Proxmox_VE)

I tested this and had succes converting [Vulnerable Pentesting Lab Environment: 1](#) from vulnhub to proxmox.

It was "pretty straight forward" .... considering I am still a proxmox noob, what I did was:

1. Copy the vmware files from vulnhub, unzip them and open in vmware workstation or aternatively Virtualbox
2. Export the virtual machine from vmware using the `file->Export to OVF ...` option or if using virtualbox `export appliance` - use the default Format settings, they should be fine.

**VMWARE TIP - if you replace the .ovf extension with .ova during export you get a single file, this is what I usually do**

3. Copy the .ova file to the /tmp directory on the proxmox server with `scp` using  
`scp VPLE.ova user@<proxmox ip>:/tmp`
4. Open the proxmox shell by selecting the node and pressing the `shell` button
5. Extract `VPLE.ova` to `.ovf` format using

```
tar -xvf VPLE.ova
```

resulting in the following files in /tmp :

```
root@proxmox:/tmp# ls -la
-rw-r--r--  1  64  64 4030016512 May 13 10:10 VPLE-disk1.vmdk
-rw-r--r--  1  64  64          173 May 13 10:07 VPLE.mf
-rw-r--r--  1  64  64         14942 May 13 10:07 VPLE.ovf
```

6. From the /tmp directory import the virtual machine to proxmox using

```
qm importovf 200 /tmp/exported-vm.ovf local-lvm
```

which is kind of tricky/not intuitive.

200 is the VM id that will used in proxmox, this has to be and id not already in use.

local-lvm is the storageID of your proxmox VM storage. This confused me to think that I need to specify the folder for my storage in ie.

`/var/lib/vz/template/iso/` which is wrong and gave me an error:

```
root@proxmox:/tmp# qm importovf 200 VPLE.ovf /var/lib/vz/template/iso/
400 Parameter verification failed.
storage: invalid format - storage ID '/var/lib/vz/template/iso/' contains
```

```
illegal characters
```

This [article](#) helped me to use the command `pvesm status` to show available storage:

```
root@proxmox:~# pvesm status
Name          Type      Status      Total      Used
Available    %
local         dir       active      236258376  20409668
205480676    8.64%
vms           zfspool   active      1885863936 69213684
1816650252   3.67%
```

the name column is the `storageID`

The correct choice for me would be to use `vms`, but I actually made a mistake and chose `local`.

I'll include the mistake in here to show how I fixed it later.

Finally, running the correct command imported the `.ovf` file!

```
root@proxmox:/tmp# qm importovf 200 VPLE.ovf local
Formatting '/var/lib/vz/images/200/vm-200-disk-0.raw', fmt=raw
size=21474836480 preallocation=off
transferred 0.0 B of 20.0 GiB (0.00%)
transferred 204.8 MiB of 20.0 GiB (1.00%)
transferred 409.6 MiB of 20.0 GiB (2.00%)
transferred 614.4 MiB of 20.0 GiB (3.00%)
transferred 819.2 MiB of 20.0 GiB (4.00%)
transferred 1.0 GiB of 20.0 GiB (5.00%)
transferred 1.2 GiB of 20.0 GiB (6.00%)
transferred 1.4 GiB of 20.0 GiB (7.00%)
transferred 1.6 GiB of 20.0 GiB (8.00%)
transferred 1.8 GiB of 20.0 GiB (9.00%)
transferred 2.0 GiB of 20.0 GiB (10.00%)
transferred 2.2 GiB of 20.0 GiB (11.00%)
..... truncated
transferred 20.0 GiB of 20.0 GiB (100.00%)
```

7. Back in proxmox my VM showed as `200 (VPLE)` and was turned off. Perfect!

I assigned a network interface from the hardware section of the VM using `add` and selecting the bridge I am using and `virtIO` as model.

Then I tried to start the VM but got an error

```
TASK ERROR: storage 'local' does not support content-type 'images'
```

Ahhh, this is the mistake I mentioned. The solution is to select the harddisk in the VM hardware section and use `Disk Action` to move the disk to a storage that supports images, in my case, you guessed it `vms` (which is a zfs pool with 2 disks in raid mirror mode)

This worked and I was able to start the MV.

8. Bonus specific to the [Vulnerable Pentesting Lab Environment: 1 VM](#)

After starting the environment and logging in through the console I checked the ip with `hostname -I` as instructed and I only got

172.17.0.1 and no address from my DHCP ?? weird.... Troubleshooting the issue showed me that my physical NIC (ENS18) was down.

I used `sudo ifconfig ens18 up` which brought the interface up, but still no ip address from DHCP.

Fix was to renew the dhcp lease with

```
sudo dhclient -r
```

and then

```
sudo dhclient
```

 to request a new lease.

This worked and output was:

```
administrator@VPLE:~ hostname -I  
192.168.1.102 172.17.0.1
```

Navigating to 192.168.1.102 from a machine on the network gave me the VPLE welcome screen.

I haven't tested all the VPLE applications, only a few that seems to work.

Remember to clean up your `/tmp` dir as the image files can consume a lot of space.

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